AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) ~~An~~ A self-generating anerobic medium composition for the selective enhancement of anaerobes from a ~~mixed~~ sample that contains facultative microorganisms, wherein said medium composition comprises a nutrient medium, a salt of an azide, wherein the azide is present in an amount sufficient to limit the growth of facultative microorganisms while not inhibiting the growth of anaerobe microorganisms, and oxygen scavenging membrane fragments to create an anaerobic environment, wherein the membrane fragments are derived from a respiratory system of an organism sensitive to azide.

2. (Previously Presented) The medium composition of claim 1, wherein the amount of the azide ranges from about 0.1 mg/ml to 1.0 mg/ml in the medium, and wherein the medium is a broth medium.

3. (Currently Amended) The medium composition of claim 1, wherein the amount of the azide ranges from about 0.01 mg/ml to 1.0 mg/ml in the medium, and wherein the medium is an agar medium.

4. (Previously Presented) The medium composition of claim 1, wherein the medium comprises Brain Heart Infusion, Brucella, CDC Anaerobe, Nutrient, Schaedler, Thioglycollate, or Trypticase Soy in broth or agar form.

5. (Previously Presented) The medium composition of claim 1, wherein the medium composition is contained in an anaerobic chamber, jar or bag.

6. (Cancelled).

7. (Currently Amended) The medium composition of claim 1, wherein the ~~mixed~~ sample is obtained from

a. patients;

b. economically important animals; or

c. pharmaceutical, or environmental sources.

8. (Currently Amended) A method for the rapid recognition, isolation, or identification of anaerobes from a ~~mixed~~ sample that ~~also~~ contains facultative microorganisms comprising the following steps:

a. providing a liquid medium composition comprising a nutrient medium and a salt of an azide, wherein the azide is present in an amount sufficient to limit the growth of facultative microorganisms while not limiting the growth of anaerobic organisms, and oxygen scavenging membrane fragments to create an anaerobic environment, wherein the membrane fragments are derived from the respiratory system of an organism sensitive to azide;

b. inoculating the sample into the liquid medium composition;

c. incubating the inoculated liquid medium composition ~~anaerobically~~;

d. ~~comparing~~ determining the presence of growth in the medium composition, with partial growth ~~with the azide~~ being indicative that an anaerobe is present; and,

e. sampling the inoculated medium composition containing the azide for further characterization and isolation of the anaerobe organism.

9. (Currently Amended) A device for the transport of a sample that contains anaerobes and facultative microbes to enable the recovery of the anaerobes, wherein the device comprises:

~~a. a medium composition comprising a nutrient and an effective concentration of a salt of azide; and,~~

~~b. a means for creating an anaerobic environment for the medium composition~~ the self-generating anaerobic medium composition of claim 1.

10. (Previously Presented) A medium composition which allows for the selective growth of anaerobic microbes contained in a mixed sample also containing facultative microbes comprising a microbiological nutrient medium containing a hydrogen donating substance, a plurality of oxygen scavenging membrane fragments which contain an electron transport system which reduces oxygen to water in the presence of a hydrogen donor, and an inhibitor of the electron transport system required for cellular respiration, wherein the inhibitor is present in an amount sufficient to limit the growth of facultative microbes while not limiting the growth of anaerobic microbes.

11. (Previously Presented) The medium composition of claim 10, wherein the hydrogen donating substance comprises an organic substrate.

12. (Previously Presented) The medium composition of claim 10, wherein the hydrogen donating substance comprises lactic acid, succinic acid, alpha-glycerol phosphate, formic acid or malic acid or any of their corresponding salts.

13. (Previously Presented) The medium composition of claim 10, wherein the oxygen scavenging membrane fragments are derived from the cytoplasmic membranes of bacteria.

14. (Previously Presented) The medium composition of claim 10, wherein the oxygen scavenging membrane fragments are derived from the cytoplasmic membranes of *Escherichia coli.*

15. (Previously Presented) The medium composition of claim 10, wherein the oxygen scavenging membrane fragments are derived from membranes of mitochondrial organelles.

16. (Previously Presented) The medium composition of claim 10, wherein the inhibitor of the electron transport system comprises an azide or cyanide.

17. (Previously Presented) The medium composition of claim 10, wherein the inhibitor of the electron transport system comprises a salt of an azide or a cyanide.

18. (Previously Presented) The medium composition of claim 10, wherein the inhibitor of the electron transport system is sodium azide.

19. (Previously Presented) The medium composition of claim 10, wherein the microbiological nutrient medium comprises Brain Heart Infusion, Brucella, CDC Anaerobe, Nutrient, Schaedler, Thioglycollate or Trypticase Soy medium in broth or agar form.

20. (Previously Presented) A medium composition which restricts the growth of facultative microbes but not anaerobic microbes comprising a nutrient medium containing a hydrogen donating organic substrate, one or more oxygen scavenging membrane fragments derived from the cytoplasmic membranes of bacteria or from the membranes of mitochondrial organelles of non-bacterial organisms, and an inhibitor of the electron transport system required for aerobic respiration.

21. (Previously Presented) The medium composition of claim 20, wherein the oxygen scavenging membrane fragments are derived from the cytoplasmic membranes of *Escherichia coli*.

22. (Previously Presented) The medium composition of claim 20, wherein the inhibitor of the electron transport system comprises a salt of azide or cyanide.

23. (Previously Presented) The medium composition of claim 20, wherein the inhibitor is sodium azide.

24. (Previously Presented) The medium composition of claim 20, wherein the inhibitor of the electron transport system is present in an amount sufficient to limit the growth of the facultative microbes but not the anaerobic microbes.

25. (Previously Presented) A medium composition which restricts the growth of facultative microbes but not anaerobic microbes comprising a base medium containing a hydrogen donating substrate, oxygen scavenging membrane fragments derived from the cytoplasmic membranes of *Escherichia coli,* and a salt of an azide.

26. (Previously Presented) The medium composition of claim 25, wherein the salt of an azide is present in an amount sufficient to inhibit the growth of the facultative microbes but not the anaerobic microbes.

27. (Previously Presented) A medium composition which restricts the growth of facultative microbes but not anaerobic microbes comprising a base medium, a biocatalytic oxygen reducing agent and a salt of an azide.

28. (Currently Amended) A method for the selective growth of an anaerobe from a ~~mixed~~ sample ~~also~~ containing a facultative microbe, said method comprising the steps of:

a. providing a medium composition comprising a nutrient medium containing a hydrogen donating substance, a salt of an azide, and oxygen scavenging membrane fragments which contain an electron transport system which reduces oxygen to water in the presence of a hydrogen donor, ~~and an inhibitor of the electron transport system required for respiration, wherein the inhibitor is present in an amount sufficient to limit the growth of the facultative microbe but not of the anaerobes~~ wherein the membrane fragments are derived from the respiratory system of an organism normally sensitive to azide;

b. inoculating the medium composition with the ~~mixed~~ sample; and,

c. incubating the medium composition containing the ~~mixed~~ sample under anaerobic conditions.

29. (Currently Amended) A method for the selective growth of an anerobe from a ~~mixed~~ sample ~~also~~ containing a facultative microbe, said method comprising the steps of:

a. providing an agar plate comprising a nutrient medium, a salt of an oxide, and oxygen scavenging membrane fragments which reduce oxygen to water ~~and an inhibitor of the electron transport system required for respiration~~ wherein the membrane fragments are derived from a respiratory system of an organism normally sensitive to azide;

b. inoculating the plated agar medium with the medium composition containing the ~~mixed~~ sample; and,

c. incubating the plated agar medium inoculated with the medium composition under anaerobic conditions thereby producing isolated colonies of the anaerobe free of facultative microbe.

30. (Previously Presented) The method of claim 29, further comprising the step of:

d. selecting isolated colonies of the anaerobes for characterization and identification.

31. (Previously Presented) A method for the selective enhancement of an anaerobe from a mixed sample also containing a facultative microorganism, said method comprising the steps of:

a. providing a nutrient medium composition containing a biocatalytic oxygen reducing agent and a salt of an azide in an amount sufficient to limit the growth of facultative microorganisms while not inhibiting the growth of anaerobic microorganisms; and

b. inoculating the medium composition with the mixed sample; and,

c. incubating the medium composition containing the mixed sample under anaerobic conditions.

32. (Currently Amended) The method of claim 31, wherein the biocatalytic oxygen reducing agent comprises oxygen scavenging membrane fragments of bacteria normally sensitive to azide.

33. (Previously Presented) The method of claim 31, wherein the biocatalytic oxygen reducing agent comprises oxygen scavenging membrane fragments of mitochondrial organelles.

34. (Previously Presented) The method of claim 32, wherein the bacteria is *Escherichia coli*.

35. (Previously Presented) The method of claim 31, wherein the salt of an azide is sodium azide.